



12-15-08

PATENT

PFW

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Katsumasa Nonoshita

Serial No.: 10/582,564

Case No.: BY0034YP

Art Unit:
1616

Filing Date: March 26, 2007

Examiner:
V. Rodriguez-GarciaFor: NOVEL-2-HETEROARYL-SUBSTITUTED
BENZIMIDAZOLE DERIVATIVECommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450RESPONSE TO RESTRICTION REQUIREMENT

Sir:

This is in response to the Restriction Requirement dated November 12, 2008, a reply to which is due on December 12, 2008.

The Examiner required an election of species based upon an alleged lack of unity of invention. Applicants designate the following specie:

6-(1-acetylpyrrolidin-2-yl)-5-(6-methoxymethylpyridin-3-yl)oxy-2-pyridin-2-yl-1H-benzimidazole.

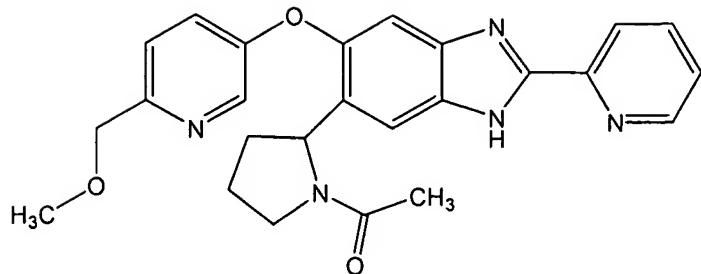
This molecule has the structure:

EXPRESS MAIL CERTIFICATE

DATE OF DEPOSIT
EXPRESS MAIL NO.December 12, 2008
EVY35857403US

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail "Post Office to Addressee" on the above date in an envelope addressed to:

Commissioner for Patents, P. O. Box 1450,
Alexandria, Virginia 22313-1450MAILED BY *Stargate Moore*
DATE 12/12/08



This compound appears in the application as originally filed at page 296, line 22 and elsewhere in the application. This compound is designated to facilitate the Examiner's search of the art, and is made with the understanding that the specie election requirement will be withdrawn upon the Examiner's making a determination that an allowable generic claim exists.

The Examiner requested that Applicants specify the values of each variable that is embodied in the elected specie. Applicants note the following:

Ring A represents a 2-pyridyl group. R³ does not exist; m is zero;

X₁ – X₄ represent carbon atoms;

R² does not exist; q is zero;

one X₅ represents –O– and the R¹ that is attached to it represents 6-methoxymethyl-pyrid-3-yl attached at position 5 of the benzimidazole core, and

the other X₅ represents a direct bond, and the R¹ that is attached to it represents an N-acetylpyrrolidin-2-yl group attached at position 6 on the benzimidazole core.

Claims which read on the designated specie include claims 1, 2, 3, 8, 9, 10, 17, 18, 19, 24, 25 and 26.

Applicants respectfully traverse the restriction requirement and election of species requirement. The Examiner has alleged that the species disclosed do not relate to a single inventive concept, as lacking the same or corresponding technical features. Applicants respectfully disagree. The bicyclic core and the nitrogen-containing ring A taken in conjunction with the biological activity of the compounds as glucokinase activators provide common features among the species that are disclosed in the application, and this constitutes a single inventive concept. Thus, the requirement under PCT Rule 13.1 has been met.

In an effort to fully illustrate the invention, Applicants have provided over six hundred examples, all of which include a benzimidazole core. Hence, for searching purposes, the Examiner may wish to focus on benzimidazoles (X₁ through X₄ represent carbons atoms).

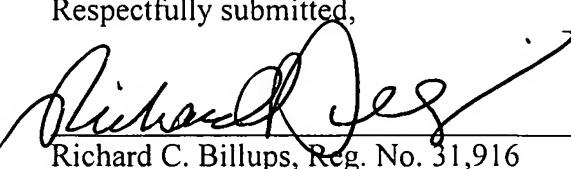
Additionally, for searching purposes, ring A can be defined as a 5-6 membered N-containing heteroaryl rings containing 1-3 additional nitrogen atoms and 0-1 sulfur or oxygen atoms.

Lastly, for searching purposes, R¹ can be focused on a 6 membered aryl ring or a 5-6 membered heterocyclic ring, aromatic or non-aromatic, containing 1-4 heteroatoms, 1-4 of which can be nitrogen and 0-1 of which can be O or S, said ring being substituted as originally described. This would cover most of the species disclosed in the application.

This response is accompanied by an Information Disclosure Statement. Since the Restriction Requirement is not an action on the merits, no additional fee is believed to be due at this time. However, if the Patent Office deems that any fees are due, such fees should be charged to our deposit account. Deposit account no. 13-2755.

An early indication of allowability is respectfully requested.

If the Examiner has any questions in connection with the application, she is respectfully requested to telephone the undersigned.

Respectfully submitted,
By 
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Date: December 12, 2008